

**THE SPIRIT OF SURVIVAL OF MARK WATNEY REFLECTED IN ANDY  
WEIR'S *THE MARTIAN* NOVEL (2015): AN INDIVIDUAL PSYCHOLOGY  
STUDY**



Submitted as a Partial Fulfillment of the Requirement for Getting Bachelor  
Degree of Education in English Education Department

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# **THE SPIRIT OF SURVIVAL OF MARK WATNEY REFLECTED IN ANDY WEIR'S *THE MARTIAN* NOVEL (2015): AN INDIVIDUAL PSYCHOLOGY STUDY**

## **ABSTRAK**

Penelitian ini fokus pada karakter dari Mark Watney pada *The Martian* novel karya Andy Weir dengan menggunakan teori psikologi individu dan fokus pada semangat bertahan hidup dari Mark Watney dalam novel *The Martian* karya Andy Weir. Novel ini bercerita tentang seorang astronot yang hidup sendiri di Mars karena ditinggalkan krunya yang mengira dia telah mati akibat badai yang terjadi di Mars. Jenis penelitian ini yaitu kualitatif. Jenis data berasal dari narasi berbasis teks dalam sebuah cerita yang terdiri dari tanda baca, karakter, kata, frasa, dan kalimat. Penelitian ini ada dua jenis objek: material dan formal. Peneliti menggunakan dua data: primer dan sekunder. Penelitian ini menggunakan kajian pustaka untuk mengumpulkan data. Teknik analisis data pada penelitian ini menggunakan deskriptif untuk menjelaskan *The spirit of Survival of Mark Watney Reflected in Andy Weir's the Martian Novel (2015): An Individual Psychology Study.* Berdasarkan penelitian, peneliti telah menyimpulkan bahwa terdapat enam aspek dari psikologi individu yang menjelaskan karakter dari Mark Watney: perasaan rendah diri, superior, tujuan semu, ketertarikan sosial, gaya hidup, dan kreatif. Semangat dari Mark Watney ditunjukkan ketika dia mengobati lukanya setelah mengalami kecelakaan akibat badai. Ada tahapan bertahan hidup dari Mark Watney: pertama kemampuan, keinginan, tetap hidup, kondisi buruk, semua sendiri, sampai selamat.

**Kata kunci:** semangat, bertahan hidup, Mark

## **ABSTRACT**

This research focuses on the character of Mark Watney on *The Martian* novel by Andy Weir using individual psychology study and focus on the spirit of survival of Mark Watney in Andy Weir's novel *The Martian*. This novel tells about an astronaut who lives alone on Mars because his crew left him who thought he had died from a storm that occurred on Mars. This type of research is qualitative. The type of data derives from the text-based narrative in a story consisting of punctuation, characters, words, phrases, and sentences. In this research there are two types of object: material object and formal object. The researcher uses two data: primary data and secondary data. This research uses library research for data collection techniques in this study. The data analysis techniques in this research using descriptive for describing *"The spirit of Survival of Mark Watney Reflected in Andy Weir's the Martian Novel (2015): An Individual Psychology Study."* Based on the research, researcher concludes that there are six aspects of the individual psychology study that explains the character from Mark Watney: inferiority feeling, striving for superiority, fictional finalism, social interest, style of life, and creative power. The spirit of Mark

Watney is shown when he treats his wound after a storm on Mars. There are survival stages from Mark Watney: first ability, desire, stay alone, under adverse conditions, all alone, until rescued.

**Keywords:** spirit, survival, Mark

## **1. INTRODUCTION**

Mars is one of the planets of the solar system that is close to the sun. It is from the ancient Greek god for war. The planet is called the red planet because it is red. The red color comes from rust color of iron-rich soil. The planet has two satellites, namely Phobos and Deimos. The planet is in orbit for 678 days with the rotation 24.62 hours and 678 days of the revolution. The planet is uninhabited because human to live here was impossible, but NASA tries to research Mars, so humans can live on Mars by sending advanced technology and astronaut.

Astronaut is a person who is trained to travel in a spacecraft. An astronaut must have a spirit to achieve its goals. Spirit is the force within a person that is believed to give the body life, energy, and power. According to Adler, humans are conscious, which means that he was aware of all the reasons for his behavior, conscious of their inferiority, can guide his behavior, and is fully aware, the meaning of the whole practice then be able to actualize themselves. (In Mahpur and Habib, 2006: 35).

The spirit of astronaut is reflected in the novel entitled *The Martian*. This novel was written by Andy Weir in 2011 and published in 2015. This novel tells about an astronaut named Mark Watney who lives alone on Mars because he had an accident. The accident began when he and his crew tried to rescue MAV (Mars Ascent Vehicle) from the storm of Mars, but an antenna hit Mark, thus damaging its spacesuit and makes his hurt. The crew who saw it thought that Mark was dead, so they left him. The accident made Mark think to look for ways to survive with his skill as farmer on Mars and looking for ways to communicate with NASA to help him.

Based on the background story, the researcher wants to analyze *The Martian* novel by Andy Weir. There are several reasons the researcher

wanted to analyze this novel. First, the author of the novel takes the reader to get to knowledge and science, and to know smart equipment of NASA. Second, the author tells the struggle of an astronaut to survive alone in Mars because when sandstorms occur, an astronaut named Mark Watney left by his crews because they thought Mark was dead when viewed from the conditions at the time. Third, the author of this novel also tells the spirit and how Mark Watney survives in impossible conditions to repair communication and farming. The last reason, the author of this novel tells the struggle NASA and the members who cooperate with NASA in an effort to rescue Mark Watney on Mars.

Based on the above reasons, the researcher is interested to analyze *The Martian* novel using individual psychology by Alfred Adler. This theory consists of six aspects included of inferiority feelings, striving for superiority, fictional finalism, social interest, style of life, and creative power. The theory will be used to analyze the character of Mark Watney in *The Martian* novel by Andy Weir.

According to Adler "each person develops a unique style of life that if formed early and remains consistent through life, directed by goals for self-improvement." Susan Cloninger (2009: 96), it is very suitable for describing the spirit of survival of Mark Watney who has a tough soul and unyielding spirit. This can be demonstrated by the constraints Mark to survive on Mars, he did move never previously suspected, for example, to communicate with the Earth and members Ares 3 previously he was desperate for a means of communication between Mars with Hermes severed but he did not give up, he tried to repair the communication tools. The communication tools will help Mark get help from Earth.

The spirit of survival and soul of Mark is a positive attribute and can be used as an example in dealing with the problems of life, especially with their lives. Many people will choice to die if conditions like Mark because they have not spirit to survive.

The spirit and unyielding will not be enough to survive in Mars without science and technology because everything done by Mark is impossible can be done by people who have no knowledge, such as planting on Mars. He took oxygenators, activation filter CO<sub>2</sub>, filter water, etc. It embodies the spirit of survival with the soul of tough and unyielding. So the researcher wants to analyze THE SPIRIT OF SURVIVAL OF MARK WATNEY REFLECTED IN ANDY WEIR'S THE MARTIAN NOVEL (2015): AN INDIVIDUAL PSYCHOLOGY STUDY. In this research, the researcher wants analysis how is character of Mark Watney analyzed using the theory of individual psychology and how is the spirit of survival reflected in *the Martian* novel by Andy Weir.

## **2. RESEARCH METHOD**

This type of research is descriptive qualitative method. In this research there are two types of objects in the study. First, material object is The Martian novels written by Andy Weir. Second, formal object is "The spirit of Survival of Mark Watney Reflected in Andy Weir's the Martian Novel (2015): An Individual Psychology Study." In this research There are two sources of data. First, primary data is *the Martian* novel by Andy Weir with format PDF. Secondary data sources in this study originated from proquest that relates the research are "Aliens Among Us: Andy Weir's The Martian Transport Him to Another world" by Hice (2013), "Q&A: Andy Weir." By Norton (2014), and "NASA and 'The Martian' by Lids (2015). This research uses library research for data collection techniques in this study. The data analysis techniques in this research using descriptive.

## **3. FINDING AND DISCUSSION**

In this research there are individual psychology study that consists of inferiority feeling, striving for superiority, fictional finalism, social interest, style of life, and creative power.

### **3.1 Inferiority Feeling**

Inferiority feeling is a natural feeling that everyone has. Adler (1997:30) stated that an abnormal feeling of inferiority has acquired



the name of inferiority complex but complex is not the correct word for a feeling that permeates the whole personality.

“We had to go out in the storm to get from the Hab to the MAV. That was going to be risky, but what choice did we have?

Everyone made it but me.” (Andy Weir, 2015: 4)

Inferiority feeling showed when Mark has an incident on Mars. He left his crew because they thought he had died. Mark felt sad because he had to live alone on Mars.

### 3.2 Striving for Superiority

The striving refers to the human’s effort in order to get perfection of life and being admitted by the others. Adler believed that the great dynamic force governing human behavior was striving to be aggressive. The aggressive impulse was followed by “will to power”. These efforts divided into three stages: “to be aggressive, to be powerful, and to be superior” (Hjelle and Ziegler, 1992:143).

“Everyone on the mission had two specialties. I’m a botanist and mechanical engineer. Basically, I was the mission’s fix-it man who played with plants. The mechanical engineering might save my life if something breaks.”

I’ve been thinking about how to survive this. It’s not completely hopeless. There’ll be humans back on Mars in about four years when Ares 4 arrives (assuming they didn’t cancel the program in the wake of my “death”). (Andy Weir, 2015:11)

Striving for Superiority showed when Mark gets the power to not give up facing death on Mars. He will strive to survive by utilizing his skills as a botanist and mechanical engineer.

### 3.3 Fictional Finalism

Hans Vaihinger believed that fiction is an idea no real existence, yet they influence people as if they really existed.

Ares 4 will be landing at the Schiaparelli Crater, which is about 3,200km away from my location here in the Acidalia Planitia. No way for me to get there on my own. But if I could communicate, I might be able to get a rescue. Not sure how they’d manage that with the resources on hand, but NASA has a lot of smart people.

So that's my mission now. Find a way to communicate with Earth. If I can't manage that, find a way to communicate with Hermes when it returns in 4 years with the Ares 4 crew. (Andy Weir, 2015: 11)

Fictional finalism showed when Mark has a mission to find ways to communicate with NASA, find ways to get the land and edible plants to be planted, and find ways to get water.

### 3.4 Social Interest

Social interest refers to nature of human who are always involved in the relationship with other people in order to achieve their goal.

"Hey," Watney panted, "Maybe we could shore up the MAV. Make tipping less likely."

"How?" Lewis huffed.

"We could use cables from the solar farm as guy lines." He wheezed for a few moments, then continued. "The rovers could be anchors. The trick would be getting the line around the-" (Andy Weir, 2015:120)

Social interest showed when Mark gives ideas to his crew to solve problems.

### 3.5 Style of Life

The style refers to unique ways in which people chase their goals.

Johanssen:

Your poster outsold the rest of ours *combined*. You're a hot chick who went to Mars. You're on dorm-room walls all over the world. Looking like that, why are you such a nerd? And you are, you know. A serious nerd. I had to do some computer shit to get Pathfinder talking to the rover and **oh my God**. And I had NASA telling me what to do every step of the way. You should try to be more cool. Wear dark glasses and a leather jacket. Carry a switchblade. Aspire to a level of coolness known only as... "Botanist Cool."

Did you know Commander Lewis had a chat with us men? If anyone hit on you, we'd be off the mission. I guess after a lifetime of commanding sailors she's got an unfairly jaded view. Anyway. Try not to think about all those guys wanking to your poster. (Andy Weir, 2015:175)

Style of Life from Mark is he has a humorous nature. He told to Johansson that she must be stylish and be cool as Mark who is a botanist.

### 3.6 Creative Power

According to Adler (in Hjelle and Ziegler 1992:150) creative power means the influences of heredity any environments toward a person in overcoming the problem of live.

I found a big container and filled it with a bit of water, then added the dried shit. Since then, I've added my own shit to it as well. The worse it smells, the more successful things are going. That's the bacteria at work!

"Once I get some Martian soil in here, I can mix in the shit and spread it out. Then I can sprinkle the Earth soil on top. You might not think that would be an important step, but it is. There are dozens of species of bacteria living in Earth soil, and they're critical to plant growth. They'll spread out and breed like... well, like a bacterial infection.."

"Within a week, the Martian soil will be ready for plants to germinate in. But I won't plant yet. I'll spread it out over a doubled area. It'll "infect" the new Martian soil. After another week, I'll double it again. And so on. Of course, all the while, I'll be adding all new manure to the effort." (Andy Weir, 2015:14)

Creative power showed when Mark needs a fertile soil. He used the big container to fill the feces, the soil of Mars, and the earth's soil, then mixed it into a fertile soil.

After analysis character of Mark Watney using individual psychology, the researcher wants analysis the spirit of Mark Watney .

Spirit is the force within a person that is believed to give the body life, energy, and power or the inner quality or nature of a person.

I stumbled up the hill back toward the Hab. As I crested the rise, I saw something that made me very happy and something that made me very sad: The Hab was in-tact (yay!) and the MAV was gone (boo!).

Right that moment I knew I was screwed. But I didn't want to just die out on the surface. I limped back to the Hab and fumbled my way in to an airlock. As soon as it equalized, I threw off my helmet. (Andy Weir, 2015: 7)

The monologue above showed that the spirit of Mark showed when he treats his wound after a storm accident. He has a high spirits to survive on Mars alone. So he trudged toward Hab to restore his condition and prepare his way of survival until he could return to Earth.

After analysis the spirit of Mark Watney, the researcher wants analysis survival of Mark Watney. There are survival stage experienced by Mark, follows:

### 3.7 Ability

According to Marriam Webster dictionary (1828) ability is the power or skill to do something.

In other news, I'm starting to come up with an idea for food. My botany background may come in useful after all.

Why bring a botanist to Mars? After all, it's famous for not having anything growing here. Well, the idea was to figure out how well things grow in Martian gravity, and see what, if anything, we can do with Martian soil. The short answer is: quite a lot... almost. Martian soil has the basic building blocks needed for plant growth, but there's a lot of stuff going on in Earth soil that Mars soil doesn't have, even when it's placed in an Earth-atmosphere and given plenty of water. Bacterial activity, certain nutrients provided by animal life, etc. None of that is happening on Mars. One of my tasks for the mission was to see how plants grow here, in various combinations of Earth or Mars soil and atmosphere.

That's why I have a small amount of Earth soil and a bunch of plant seeds with me. (Andy Weir, 2015: 12)

The monologue above showed that he used his skills as a botanist to overcome food shortages.

### 3.8 Desire

According to Menurut Marriam Webster dictionary (1828) desire is "to want or wish for something".

So instead, I went to good old "Spare Parts" Rover 1, and stole it's environment heater. I've gutted that poor rover so much, it looks like I parked it in a bad part of town.

Bringing the heater to my “workbench,” I hooked it to Hab power. Then I rested it in the Lander where the battery used to be.

Now I wait. And hope. (Andy Weir, 2015: 99)

The monologue above showed that Mark wants the pathfinder to work again. He tried to repair the pathfinder that had died because of running out of battery, so he picked up the heater in Rover 1 and connected it to the Hab power.

### 3.9 Stay Alive

According Peter Kummerfeldt, 2017), “Stay alive means “being able to administer first aid – to yourself.” If someone had an accident and no one can help him, the individual can aid to himself, like Mark that did something when he had accident on Mars.

Entering the Hab, I doffed the suit and got my first good look at the injury. It would need stitches. Fortunately, all of us had been trained in basic medical procedures, and the Hab had excellent medical supplies. A quick shot of local anesthetic, irrigate the wound, 9 stitches and I was done. I’d be taking antibiotics for a couple of weeks, but other than that I’d be fine. (Andy Weir, 2015: 7)

The monologue above showed that Mark tried to stay alive by treating his wounds when he was hit with an antenna. In addition, Mark wants to recover his backache from carrying stones. He does not want something bad happen to him. Therefore, he needs time to rest in order to stay alive.

### 3.10 Under Adverse Conditions

According to Peter Kummerfeldt (2017) “If you can see yourself in a survival situation, then preparing for it will naturally follow.”

The full force of the Hab’s atmosphere rushed through the breach. Within a tenth of a second, the rip was a meter long, running parallel to the seal-strip. It propagated all the way around until it met its starting point. The airlock was no longer attached to the Hab.

The unopposed pressure violently launched the airlock like a cannonball as the Hab exploded. Inside, the surprised Watney slammed against the airlock's back door with the force of the expulsion.

The airlock flew 40 meters before hitting the ground. Watney, barely recovered from the earlier shock, now endured another as he hit the front door, face first. (Andy Weir, 2015: 139)

The monologue above showed that Mark was injured when a minor storm attacked Hab. There was a leak in Hab that caused Airlock 1 to slip out of Hab and hit Mark's face in a space suit. The incident caused Mark's helmet break and he fainted.

### 3.11 All alone

Peter Kummerfeldt (2017) said that "Never count on anyone else being there to help you when you are in trouble."

If I can get to the Ares-4 MAV, I'll be set. But having lost contact with NASA, I have to design my own Great Martian Winnebago.

For the time being, I've stopped all work on it. I don't want to continue without a plan. I'm sure NASA had all kinds of ideas, but now I have to come up with one on my own. (Andy Weir, 2015: 205)

The monologue above showed that Mark does not rely on the help of people to solve the problem. When Pathfinder off from a drill, Mark can not communicate with NASA again, but he still wants to travel to Schiaparelli without NASA's help. He will design Great Martian Winnebago which is a vehicle to go to Ares 4 or known as Schiaparelli.

### 3.12 Until Rescued

Peter Kummerfeldt (2017) said that "Beyond readying the appropriate signals to attract the attention of rescuers."

Holy shit this is awesome! Holy shit! Holy shit! Ok calm. Calm.

I made 90km today. By my estimate, I'm 50km from the MAV. I should get there some time tomorrow. I'm excited about

that, but here's what I'm really stoked about: I caught a blip from the MAV! (Andy Weir, 2015: 291)

Well, right this second, I'm back in the rover. I did go in to the MAV to do a systems check and boot-up. I had to keep my EVA suit on the whole time because there's no life support in there just yet. (Andy Weir, 2015: 293)

The monologue above showed that Mark closed the MAV. He has managed to drive 90 km and has left Terra Meridiani. He is very happy because he get a signal from MAV which means he can communicate with NASA, so they will rescue Mark.

So now I'm waiting for the drugs to kick in. My ribs hurt like hell, my vision is still blurry from acceleration sickness, I'm really hungry, it'll be another 211 days before I'm back on Earth, and apparently I smell like a skunk took a shit on some sweat socks.

This is the happiest day of my life. (Andy Weir, 2015: 331)

The monologue above showed that Mark has pain and feels happy. He was sick from a violent collision at the time of the rescue, causing his ribs to hurt. He was happy to survive on Mars and finally he rescues and will return to Earth 211 days with his friends.

#### **4. CONCLUSION**

Based on the results of the study entitled “The Spirit of Survival of Mark Watney Reflected in Andy Weir’s *The Martian* Novel (2015): An Individual Psychology Study”, the researchers conclude that there are six aspects of the individual psychology study that explains the character of Mark Watney. The first is the inferiority feeling that showed when Mark experienced an incident on Mars. The second is the striving for superiority that comes when Mark gets the power to not give up facing death on Mars. The third is the fictional finalism showed when Mark has a mission to find ways to communicate, get soil, and find ways to get water. The fourth is Social interest showed when Mark give idea to his crew to solve their problems. The fifth is the Style of Life of Mark is he has a humorous nature.

The last is creative power can be seen when Mark utilizes big containers, feces, Earth and Mars soil to get fertile soil and he uses the explorers to be transformed into a tank with a capacity of 900 liters. The spirit of Mark showed when he treated his wound after a storm accident. There is a stage of survival Mark when on Mars, the first ability, desire, stay alone, under adverse conditions, all alone, until rescued.

## **BIBLIOGRAPHY**

Aneheim. (1993). *Divine Spirit*. Obtained 27 October 2016, from [www.Ism.org/pdfs/Gospel-Tracts/Vital-Group-Tracts/Divine-Spirit.pdf](http://www.Ism.org/pdfs/Gospel-Tracts/Vital-Group-Tracts/Divine-Spirit.pdf)

Cloninger, S. (Eds.). (2009). *Theories of personality*. United States of America: Right and Permission Departement.

[Hamdi, M. \(2015, September 09\). Teori kepribadian alfred adler. From hamdimuhamad.blogspot.co.id/2015/09/teori-kepribadian-alfred-adler.html?m=1](http://hamdimuhamad.blogspot.co.id/2015/09/teori-kepribadian-alfred-adler.html?m=1)

Hice, R. C. (2013). Aliens among us. *Andy Weir's The Martian Transport Him to Another world*. Obtained 2 November 2016, from <http://search.proquest.com/docview/1717285147?accountid=38628>

Kummerfeld, P. (2017). Survival commonsense. Obtained 3 May 2017, from <https://survivalcommonsense.com/peter-kimmerfeldt-what-is-survival/>

Lids, G. (2015). Nasa and the martian. *It was Written in the Stars*. Obtained 2 November 2016, from

<http://search.proquest.com/docview/1716255868?accountid=38628>

Norton, E. (2014). q&a. *Andy Weir*. Obtained 2 November 2016, from <http://search.proquest.com/docview/1465269333?accountid=38628>

Nurul, A. (2015). Single parenthood reflected in Daniel Steel's winner (2013) novel: an individual psychological approach. Obtained 2 November, from [Eprints.ums.ac.id/34801/](http://Eprints.ums.ac.id/34801/)



- Prima, C. A. (2015). Conflict of love in Anton Chekhov's *The Seagull* (1895): an individual psychological approach. Obtained 2 November, from [Eprints.ums.ac.id/34869/](http://Eprints.ums.ac.id/34869/)
- Weir, A. (2015). *The martian*. Obtained 12 September 2016, from <https://taostigerscience.files.wordpress.com/2015/10/the-martian-andy-weir.pdf>
- \_\_\_\_\_. (1828). *ability*. Obtained on 3 May 2017, from [www.merriam-webster.com/dictionary/ability](http://www.merriam-webster.com/dictionary/ability)
- \_\_\_\_\_. (1828). *desire*. Obtained on 3 May 2017, from [www.merriam-webster.com/dictionary/desire](http://www.merriam-webster.com/dictionary/desire)
- \_\_\_\_\_. (1963). *Spirit*. Obtained on 27 October 2016, from [www.merriam-webster.com/dictionary/spirit](http://www.merriam-webster.com/dictionary/spirit)
- \_\_\_\_\_. (2015). *Survival*. Obtained on 27 October 2016, from [www.merriam-webster.com/dictionary/survival](http://www.merriam-webster.com/dictionary/survival)
- \_\_\_\_\_. (2017). Definition astronaut. Obtained 14 April 2017. From <https://en.oxforddictionaries.com/definition/astronaut>.